Revised 09/09

PHYS 2070 Introduction to Physics I (3-0-3)

Course Maximum Enrollment: 25

Special Facility or Equipment Needs/Safety Rules and Issues: None

Lab Fee: None

Course Description: Algebra-based study of the fundamental principles and applications of motion, work, energy, momentum and angular momentum, forces, vibrations and waves, and heat.

Pre- and Co-requisites: A grade of "C" or better in MATH 1100

Texts and Readings: Custom
(*Physics* by James S. Walker, Pearson Prentice Hall, 3rd edition or latest edition)

Course Goal: Is to acquaint students with college level, algebraic physics as it applies to fundamental applications of motion, work, energy, momentum and angular momentum, forces, vibrations and waves, and heat.

Course Objectives: After completing the course the student will have a better understanding of :

- Motion
- Newton's Laws of Mechanics
- Energy and its Conservation
- Dynamics
- Gravitation
- Waves (sound)
- Temperature
- 1st Law of Thermodynamics
- Theory of Gases

Course Content:

Measurements
Vectors
Motion
Newton's Law of Mechanics
Energy, Work and the conservation of Energy
Collision Dynamics
Rotational Kinematics
Simple Harmonic Motion
Gravitation
Wave Motion-Sound

Temperature-Heat
1st Law of Thermodynamics
Kinetic Theory of Gases
2nd Law of Thermodynamics

Assessment: Grades will be assessed based on student performance on exams, quizzes and other assignments as deemed appropriate by the instructor

Reading and Writing Across the Curriculum: The reading and writing components of these aforementioned assessments satisfies the Reading and Writing Across the Curriculum requirement as stipulated in SLCC's academic policy.

Grading and Absence Policy: Grading Scale: 100-90 = A; 89-80 = B; 79-70 = C; 69-60 = D; 59-0 = F. Students who miss 10% of class meetings will be advised to see a counselor. Students who merely stop attending and chose not to withdraw will earn an "F" for the course.

Students with Disabilities: Students with a disability requiring assistance or accommodation, such as for testing, note takers, readers, etc., should contact the instructor as soon as possible. Students may also contact the dean of Students with questions about such services.

Emergency Evacuation Procedure: A map of this floor is posted in the front of this building. The map marks the evacuation route and the Designated Rescue Area. This area is where emergency service personnel will go first to look for individuals who need assistance in exiting the building. Students who may need assistance should identify themselves to the teaching faculty.